# Students as Active Citizens: a systems perspective on a Jean Monnet Module, experiential learning and participative approaches

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**Purpose:** Students develop knowledge through an ongoing process of learning embodied in their daily experiences. As citizens, they develop an identity in their communities as they build relationships through recurrent interactions, thus constructing citizenship by strengthening stable interactions. This paper examines the development of student active citizenship within a Jean Monnet module summer school that employs a participative approach and experiential learning.

**Design/methodology/approach:** The research provides a multi-level systems perspective on the learning experience in a Jean Monnet module. It combines state-of-the-art analysis of the Jean Monnet modules reports, analysis of a selected module's activities, and delayed participants feedback analysis. The methodology addresses complexity at multiple levels and leaves sufficient variance to invite readers to test the approaches themselves.

**Findings: There are several major findings**. First, opportunities and gaps in the development of active citizen abilities were identified within the Jean Monnet modules. Second, it was established that the use of a participative approach and experiential learning aligned activities in the learning process yielded positive results in participant engagement. Third, long-term effects in the form of an improved understanding of active citizenship and the execution of activities in real life were also observed. We point to the need for active communication in the development of a full-cycle experiential learning process. Additionally, the multi-level monitoring model contributed positively toward the continual improvement of the learning process and thus provided a learning experience for teachers.

**Originality/value:** The paper identifies the gap between the Jean Monnet modules and active citizen abilities and provides a potential approach toward reducing them. It also provides a multi-level method for monitoring and adjusting the learning process.

**Research limitations**: The research is limited regarding the clear articulation of the research results, rendering comparison with other learning experience reports challenging.

**Research/ Practical/ Social/ Environment implications:** For lecturers, the importance of integrating the participative approach into the student learning process is documented; the effects of experience learning on students' active participation are presented; and the importance of systems perspective on multiple aspects of the learning process is reinforced.

For students, an example of the importance of being active in the learning process and using available resources is provided.

For policy makers, the article attests to the importance of learning programmes expanding the limitations of the regular curricula and the need to support additional programmes, as well as the

benefits of a participative approach and experience learning in the process of developing active citizens.

**KEYWORDS:** Systems perspective, active citizenship, participative approaches; experiential learning, learning impact, European Union; Jean Monnet

## 1 Introduction

It is common to hear on social networks that the 'system' is responsible for our current problems. If the roots of a problem are not restructured, and persist, the consequences of the problem will remain. Social networks are demanding a reinvention of democracy built upon real participation, transparency and accountability (Castells, 2011).

We need to develop greater sensibility in order to understand how we learn to increase our awareness of what we can adopt and change for our common protection and wellbeing (Tam, 2018). The gaps in learning processes identified by the World Bank Report (The_World_Bank, 2018) provide evidence that schooling is not the same as learning and that there are millions of young adults who are ill-equipped to succeed in life, even if they receive formal education.

In the information age, the university is a central institution where, more than ever, information and communication are a source of power; the university as a principal generator of knowledge is a central actor in the development of social capacity to democratise knowledge and achieve equal opportunities (Castells, 2017).

The UK 'Take Part' approach is based on a participative research that contributes to the promotion of Active Citizens Learning processes, community engagement and empowerment. 'Take Part' is a university and communities partnership (Fals-Borda and Rahman, 1991), the purpose of which is to make conceptual and practical contributions to learning about social transformation as an ongoing process of continued learning in communities. (Mayo et al., 2013). In this paper, the effects of the participative research approach on regular students are examined.

Since Jean Monnet modules provide an opportunity for the rather rigid academic system to develop new learning concepts, we investigate the alignment of Jean Monnet Modules with the development of active citizenship learning through the lenses of the participative approach and experiential learning.

The paper consists of four major sections. In the backgrounds, the concepts of Jean Monnet modules, Active Citizens Learning, the participative approach and experiential learning and systems thinking are outlined. Next, the methodology of the multi-level systemic perspective is presented: context analysis, activities analysis, and delayed feedback analysis. These layers are synthesised and commented on in the summary.

## 2 Backgrounds

To explore the alignment of the Jean Monnet module with Active Citizens Learning using participative approaches and experiential learning, the backgrounds of all of these elements are examined. These background examinations will provide an insight into the conceptual level and enable a systematic comparison on the declarative, activity and feedback levels.

### 2.1 Jean Monnet modules

Jean Monnet programmes are currently coordinated within Erasmus+ activities (EACEA, 2018); however, the idea underpinning them is inseparable from one of the EU's key founders: Jean Monnet (1888-1979). These activities, designed to contribute to an integrated Europe, were conceived immediately after the Second World War according to the "Theory of l'Engrenage", through which Monnet successfully interlinked the German and French coal and steel industries, proving a model for interstate cooperation within European countries(EACEA, 2018).

Jean Monnet's thoughts on long-term arrangements were articulated as early as 1939 (Monnet, 1939):

- Plan for the political and economic reconstruction of Europe;
- Situation of Europe in relation to the United States, the United Kingdom and the Soviet Union;
- Programme for settlement of the German question; population movements;
- Constitution of a European inventory of heavy metallurgy;
- Monitoring of aircraft manufacture and airlines by a European authority;
- Association of the US, UK and USSR in these systems and controls;
- Political and financial organisation of Europe;
- Holding of a World Council with European participation.

Monnet and his associates conceived the idea of a European Community. On 9 May 1950, with the agreement of Chancellor Konrad Adenauer of West Germany, the French Minister of Foreign Affairs Robert Schuman made a declaration in the name of the French government. This declaration, prepared by Monnet for Schuman, proposed integration of the French and German coal and steel industries under joint control, a so-called High Authority, open to the other countries of Europe. Schuman declared:

"Through the consolidation of basic production and the institution of a new High Authority, whose decisions will bind France, Germany and the other countries that join this proposal, represents the first concrete step towards a European federation, imperative for the preservation of peace." (EU, 1950, p. p12). Current EU organisational structures reflect Monnet's original ideas, which have influenced common people, organisations and policy makers in their recognition of the synergy of cooperation over simple competition methods.

The Jean Monnet programme, coordinated under the auspices of Erasmus+ (EACEA, 2018) fosters and promotes excellence in teaching and research in the field of European Union studies worldwide in order to help tackle socio-economic changes, i.e. the key challenges that Europe will face. The activities also support dialogue between the academic world and policy-makers, in particular with the aim of enhancing governance of the EU. Teaching and research institutions support the organisation of Jean Monnet Modules, Chairs and Centres of Excellence (Erasmus+, 2018b).

Among other activities, the Jean Monnet programme supports (Erasmus+, 2018b) academic modules, the so-called Jean Monnet Academic Modules (JMAM), which have two main aims: to further teaching in European integration studies embodied in the official curriculum of higher education institutions and to provide in-depth teaching on European integration for future professionals in fields which are in increasing demand on the labour market. At the same time, they aim at encouraging, advising and mentoring the next generation of teachers and researchers in European integration subject areas.

Even though Erasmus+ supports the teaching of EU concepts, it is not clearly evident how Jean Monnet activities support young EU citizens in increasing their learning capabilities and in coping with the issues they face, especially in circumstances in which they are not fully integrated into their environment.

### 2.2 Active Citizens Learning

Multiple researchers have addressed active citizens learning process as spaces enabling individual and collective critical understanding of the realities, issues, perceptions and expectations of communities in order to develop strategies for social transformations (Mendiwelso-Bendek, 2015). Also as a need to enable lifelong learning through the design of informal activities and facilitate the strengthening of the capacity of learners to recognise, reinforce, and share their knowledge (Mayo et al., 2013).

(Lange, 2004) for instance explored the potential of critical transformative learning for revitalizing citizen action. The author found that transformation is an epistemological as well as an ontological

process in which participants experienced a change in the real world. Similarly (ten Dam and Volman, 2004) elaborated on critical thinking as a crucial aspect of the competence citizens need in order to participate in society. The authors proposed a number of concepts to enhance critical thinking: paying attention to the development of the epistemological beliefs of students; promoting active learning; a problem-based curriculum; stimulating interaction between students; and learning on the basis of real-life situations. However, they failed to provide empirical proof. In a world of overstretched methodologies, we find this refreshing. The authors also stated that the learning contexts should be carefully adapted to the current capacities of the students. They should make sense of, but at the same time, challenge the students to develop through the process of finding an appropriate solution.

(Marri, 2005) investigated how to prepare students for active and effective citizenship using cases about and for multicultural democracy. The author presented the ways in which students were provided with "codes of power" and skills for effective citizenship, and how teachers extended the curriculum beyond "official knowledge". (Martens and Gainous, 2013) explored how teachers teach civics to find out what works best in preparing young people for responsible, democratic citizenship. The authors suggest that fostering an open classroom climate when teaching such subjects is the surest way to improve the democratic capacity of America's youth. Further, teachers should be attentive to the instructional trade-offs necessary when creating student capacities for both active and informed citizenship.

Some authors addressed the measurably and potentially negative feedback from teachers and students. (de Santos et al., 2018) analysed the degree of democratization of educational experiences and developed a system of indicators to verify compliance with the foundations of education.(Velardo, 2018) stated that the development of active citizens demands a radical shift in teaching towards more interactive pedagogies, which may prove difficult for some educators and students who are comfortable with a traditional model of learning and teaching 'for the test'. The authors examined multiple strategies, e.g. the facilitation of discussions to ignite empathy, integrating problem-solving activities and building advocacy competencies. A collaborative, learner-directed approach is considered the way forward for other university educators as a way of shifting from previous pedagogic strategies that emphasise knowing about social problems rather than acting on them.

The research evidence presents how active/experiential/participative citizen learning involve active and step-by-step interaction to learn and practice a wide array of required knowledge, abilities and confidence to support the organisational competence of disadvantaged and vulnerable communities, and to enabling empowerment processes. (Mayo et al., 2013).

In the Table number 1, we can observe, from the UK Take Part Learning Framework (Mendiwelso-Bendek et al., 2013) (reference), the connections between citizenship aspects (personal, communal, civil or civic), with citizen learning processes and citizenship outcomes. The intrinsic relation between these elements generate a circular loop between knowledge, skills, confidence and processes and structures to increase citizens' capabilities and empower communities.

*Table 1 Aspects of active citizenship- learning processes and citizenship outcomes*

| **Aspects of active citizenship** | **Citizen learning processes:**<br>**I feel able to…I know more about…**<br>**I know how to...** | **Citizenship outcomes:**<br>**Local, national, European and global dimensions** |
|---|---|---|
| **Personal** | • Value my own skills, knowledge and confidence<br>• Know where to go to get what I need<br>• Communication skills, negotiation skills, lobbying skills<br>• Feel able to have a voice | • People identity and articulate their issues and problems<br>• People take leadership roles in their community<br>• People have the power and will to make choices in their life<br>• People voice their concerns |

| | | |
|---|---|---|
| **Community relations** | • Recognise that social inclusion is the responsibility of all<br>• Understand how their behaviour affects others<br>• Know the basis of inequality and how power operates<br>• Understand more about people who are different to themselves<br>• Feel more confident in asking | • Improved relations between diverse groups of people<br>• Community projects are inclusive of people with different backgrounds<br>• Increased points of contact between different communities<br>• Increased networking between communities |
| **Civil participation** | • Understand how groups/networks work<br>• Know how to encourage fair and democratic decision-making<br>• Understand how to encourage support and develop volunteers<br>• Know the importance of networking and delivering change<br>• Chairing, meeting and facilitation skills<br>• Negotiation and campaigning | • More civil society groups active in community-led service provision<br>• Well-run democratic community groups<br>• Increased informal community organising<br>• Increased networking between community and voluntary groups<br>• Effective representation in partnership and involvement with public bodies<br>• Increased volunteering opportunities |
| **Civic engagement** | • Knowing how the external world operates<br>• Understand my current democratic position and the opportunities for change<br>• Understand the rules of engagement<br>• Aware of range of opportunities for civic participation<br>• Understand role of elected representatives and how to lobby them/ work with them<br>• Know how public meetings work<br>• Feel able to contribute and ask questions at a public forum<br>• Recognise how to influence policy and<br>practice at a European, national, regional or local level | • More people want to and feel capable of having a responsible role in formal democratic structures<br>• More people play an active role on a community neighbourhood level<br>• Citizens work with public bodies to define and achieve common goals<br>• Improved relations between citizens and statutory agencies<br>• More people take part in dialogue with decision-makers<br>• People lobby for change in the way forums and other structures operate<br>• People campaign and petition |

### 2.3 (Mendiwelso-Bendek et al., 2013)Participative approaches and informal learning

The UK 'Take Part' is a participative approach that has contributed to the promotion of active citizenship, learning processes and community engagement and empowerment, based upon democratic values such as social justice, equality and social solidarity. It is designed to improve citizens' knowledge, skills and confidence, to co-develop civil society values and also to reflect on the structures and processes that enable real participation. 'Take Part' has been developed by British universities in partnership with communities supported by the conceptual developments of, among others, Paulo Freire and Orlando Fals-Borda (1991) as on-going processes of continued learning in community realities (Mayo et al., 2013). These participative approaches have been implemented to support Active Citizens Learning in order to build up local citizenship knowledge, support people and organisations in

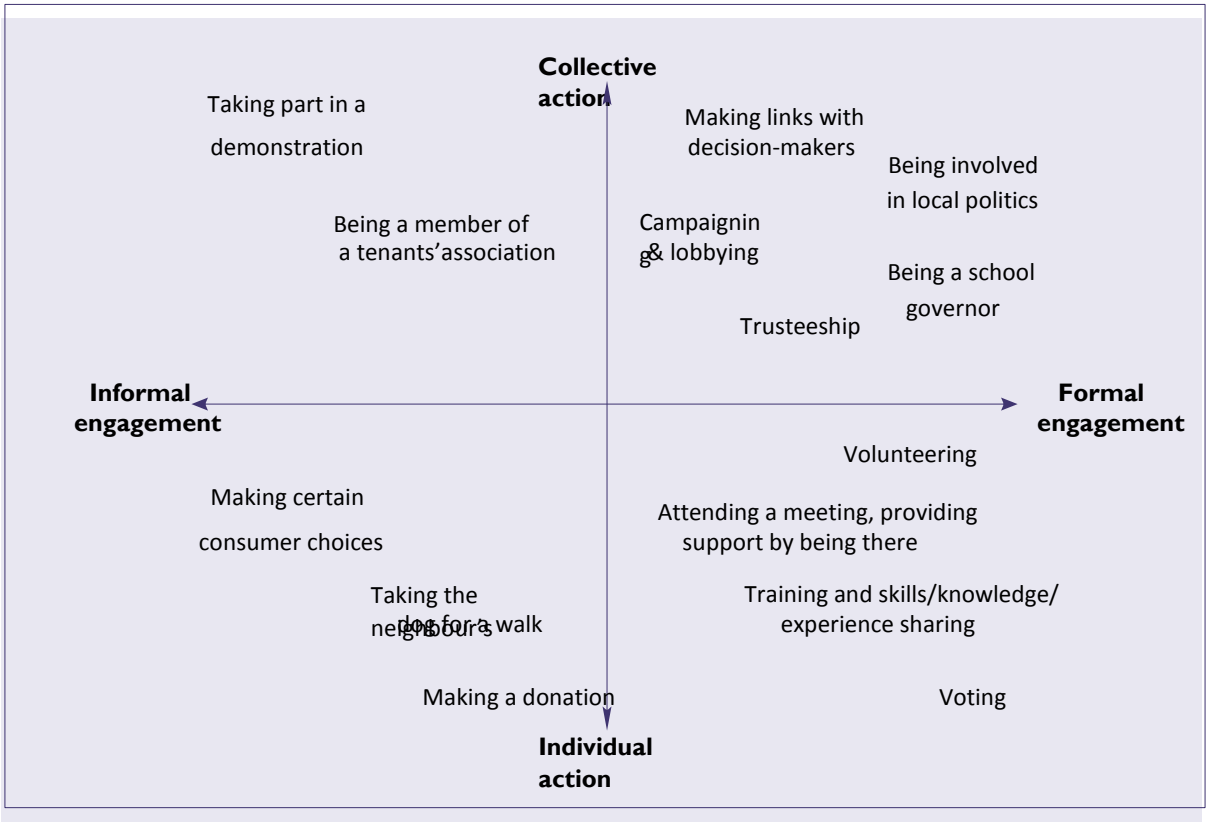
their understanding of barriers to participation and to raise awareness of routes into lay governance roles.

The participative approach might 'partially' conflict with traditional teaching programmes, as they focus on teaching to form individuals capable of fitting into existing organisations and executing predefined tasks and services in these organisations, rather than on merely delivering knowledge to students.

The participative approach is designed to equip learners with the skills required to address the complexity of the environment, not only to thrive but also to actively change it for the better. It combines an understanding of the environment learners operate in, the methods through which changes can be applied, and the outcome of these changes. It provides the understanding that learners have the power to change their environment by supporting and executing activities, while also helping them to connect with society.

Participative approaches were originally focused on people on the fringes of the system, lacking the organisational support to produce change, deprived individuals who do not conform to the traditional education system and may have abandoned it. This approach has been adopted as one of the learning techniques to support active citizenship, providing support and sharing experience with other people and groups in similar situations.

*Figure 1 Types of active citizenship practices illustrating the connections between individuals*




(Jochum et al., 2005)

Participative approaches play a significant role in engaging youth in experiencing processes. Freire's approach (Freire, 1972)to community education and experiential learning is a cornerstone of Active Citizens Learning in international programs. The approach is based on constant dialogical and dialectic reflection, observation and understanding of power structures. It enables individuals and collectives to develop a critical understanding of their realities and contexts in order to develop strategies for

social transformations (Freire, 1972), while also offering opportunities within the learning in processes that influence decision making (Mendiwelso-Bendek, 2015).

The complexity of participatory approaches surpasses standard teaching methods and requires greater effort on the part of all the participants. Somech (2002) proposes a multidimensional approach to introducing participative management, examining five dimensions of it: decision domain, degree of participation, structure, target of participation, and rationale. (Guerin et al., 2013) on the other hand, report on issues in applying a participative approach in the standard curriculum and present three kinds of constraints that make the implementation of such an approach unrealistic: (1) insufficient specialist knowledge on the part of teachers and head teachers, (2) time and budget constraints and (3) an overcrowded curriculum.

Subramaniam (2012) explores the concept of lifelong learning programmes implemented in Malaysian community colleges, in terms of goals, types and features. He reveals that age, gender, occupational strata and qualifications were not a barrier to participation and that the variety of courses, including specialised courses offered for a nominal fee in the community colleges, attracted participation from members of the community.

Innovative, participative and inclusive approaches to lifelong learning offer extraordinary opportunities for the social, educational, citizenship and labour market integration of young adults and other disadvantaged, non-traditional adult learners. However, whilst such programmes are making valuable contributions to Europe 2020's (EUExpertAdvisoryGroup, 2018) on employment, poverty reduction, education, sustainability and innovation, their full potential is currently underestimated in formal learning at the Higher education institutions (HEIs). The EU has pointed out that the growing number of young, under-educated and unemployed adults at risk of social and educational exclusion are not served by the lifelong learning market (European_Commision, 2016) which impacts on Europe's economic growth and social cohesion.

### 2.4 Experiential learning

At the core of the research is the view that learning is a cyclical process, which starts with observing a situation, assessing it, designing improvements and implementing changes (Espejo et al., 1996). In this research, the focus is on reflective observation, followed by abstract conceptualisation and active experimentation. The cycle is completed by concrete experiences; this is the cycle of experiential learning shown in figure 2.

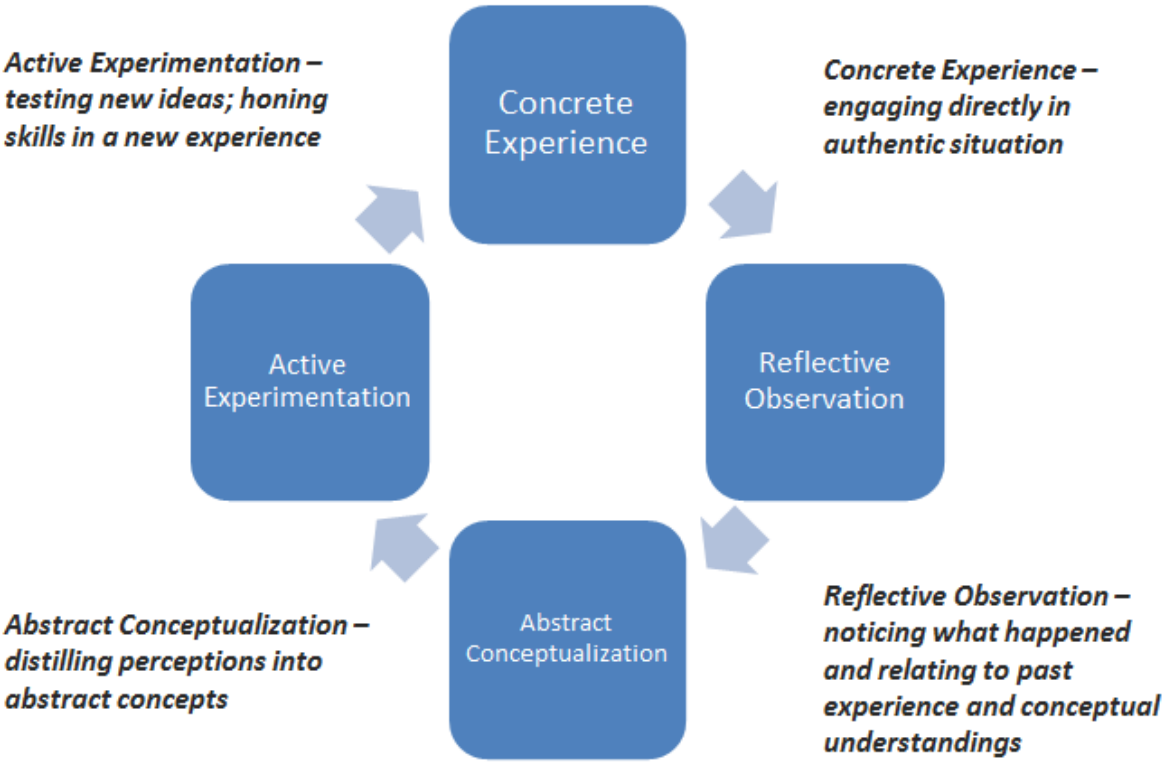
Experiential learning is the process of learning through experience and can be more specifically defined as "learning through reflection on doing" (Holmqvist, 2004). Experiential learning provides the student with the option of gathering their own experience. It can be provided in multiple forms, ranging from passively observing an event, through to experiencing its effects, being actively involved as an individual or a member of a team, and managing and planning an event.

Although it is presumed that in experiential learning the teacher plays a comparatively passive role, supporting the student in gathering, understanding and remembering the body of knowledge through experience, the path to success may be different. To deliver a successful learning experience, the teacher must also be challenged to (re)experience the case and – hopefully – gain new insight resulting from the interaction with the student (Revell and Wainwright, 2009).

In terms of the resources employed by the teacher, the student and the learning environment, experience learning is an extremely high-cost method, although it also provides high-level results.

According to (Kolb and Kolb, 2005), experiential learning is recurrent, as depicted in figure 1. The process starts with concrete experience, moves on to observation and conceptualisation and concludes with planning for new experiences.

*Figure 2 Cycle of experiential learning*




(Kolb and Kolb, 2005)

There is a vast variety of experiential learning examples with multiple levels of complexity:

- **Internships**: often a credit-bearing, free-standing activity in a student's field of interest not connected to a theoretical course.
- **Case studies**: in-classroom examinations of real-life examples.
- **Cooperative education:** students gain practical relevant work experience over a period of multiple terms that intersperse their coursework.
- **Student teaching**: an experience specific to students in pre-professional and pre-service teacher education who are gaining the necessary experience in supervised teaching.
- **Practicum:** a relative of internship, this form of experiential learning usually is a course or student exercise involving practical experience in a work setting.
- **Undergraduate research experience:** students function as research assistants and collaborators on faculty projects.
- **Community-based research**: faculty and students cooperate with local organisations to conduct studies to meet the needs of a particular community.
- **Field work:** supervised student research or practice carried out away from the institution and in direct contact with the people, natural phenomena, or other entities being studied.
- **Study abroad**: students usually engage in courses at higher education institutions in another country.

There are multiple research reports on experiential learning results. (Lantz et al., 2015) explore job design mechanisms that enhance team proactivity within a lean production system in which autonomy is heavily restricted. They suggest that team learning builds a shared meaning of work and mediates the relationship between team participative decision-making, inter-team relations and team proactive behaviour.

(Kakouris, 2015) addresses an instructional perspective for entrepreneurship courses, in which critical thinking is connected with experiential learning in a common framework able to facilitate entrepreneurship education for various heterogeneous populations through lifelong learning or vocational training. He suggests conceptualization through critical instruction either to resolve disorienting situations or to lead to the postponement of courses and reconsideration of the theoretical framework.

(Hemetsberger and Reinhardt, 2006) present the learning and building of collective knowledge by the members of innovative online communities through the use of 'technologies' and the establishment of discursive practices that enable virtual re-experience. They review theories of knowledge creation and learning and suggest that re-experience is enabled by code, transactive group memory, instructive content and discourse, and reflective discourse. The manifestations of learning processes lead to concrete experience, reflective observation, abstract conceptualization, and active experimentation at the individual level. Collective reflection, collective conceptualization, virtual experimentation, and participative practice are initiated at the social level.

Experiential learning is used by organisations in the preparation of employees for new tasks and positions, while in faculties, it is used as a supplementary part of the curriculum. The relatively low level of experiential learning in faculties can be related to its high price. All of the participants, i.e. the teachers, the students and the institution, must dedicate a high level of resources to actively execute experiential learning methods in the learning process.

Since experiential learning is universal, as it can support any domain of knowledge and involve experiences at multiple levels of complexity, the question arises as to what kind of experiential learning would provide the most added value for the students of business and economics. To help in the understanding of basic topics, simple examples are adequate, but to provide a higher-level understanding of complex business, economic and social processes, more complex experiential models such as a participative approach may be appropriate.

### 2.5 Systems thinking

Systems thinking focuses on the way a system's constituent parts interrelate and how systems work over time and within the context of their environment - larger systems (Anthony, 1965; Ashby, 1956; Bogdanski, 1977). Systems thinking is used to better understand, predict and manage system behaviour based on its goal set, capacities and environment properties (Bratman, 1987).

From the systems perspective, any complex entity capable of modifying its environment and itself should be observed as a system. Systems exists if their effects on the environment are superior to the combined effects of their subsystems (Boulding, 1956). Their internal structure reflects the required capacity to reach their goals (Espejo et al., 1999) and can easily combine multiple subsystems: for instance, the ability to sensor the environment and its internal structure, combined with the activity to send signals, enable systems to communicate and (self) organise.

Ideally, one should know the system’s internal structure and environment in detail. However, according to Mulej and Potocan (2007), it is challenging enough to acquire the requisite holistic representation of a system. Sanchez-Segura et al. (2018), for instance, combine multiple perspectives to gain a requisite holistic perspective on the problem for the formation of an appropriate project team.

Systems theory can provide holistic representations of the behaviour of complex systems and can therefore be used to identify and explain the behaviour of social systems, where the interactions of multiple systems generate a complexity level that is extremely hard to understand using conventional means (Espejo and Kuropatwa, 2011; Espinosa, 2015; Holten and Rosenkranz, 2011; Rios et al., 2012).

## 3 Methodology

The methodology was designed upon the Take part research evidence on Active Citizens Learning and the Jean Monnet modules background and perspectives. Aiming to gain a wider holistic perspective on the correlation between them, we defined three a level analysis: an overall context analysis of the Jean Monnet reports, selected Jean Monnet module activities analysis, and delayed feedback analysis. All of them are taking under consideration the multiple perspectives, realities, challenges and dilemmas from the participants perspectives.

### 3.1 Context analysis

The level of insight is limited by the data source quality and the analytic tool capacity. It is relatively easy to analyse quantitative properties, yet it is more difficult to analyse non-structured or semi-structured text.

Data preparation involves data extraction, data transformation and data cleansing using a stop list, followed by text evaluation and word cloud and collocation visualisations (Kobayashi et al., 2018).

Word cloud sizes help in visualising word recurrence and importance. As the algorithm goes through the list and continues to attempt to draw words as close as possible to the centre of the visualization, it also includes small words within spaces left by larger words that do not fit together comfortably. It is important to understand that the colour of words and their absolute position are not related to the content (Sinclair and Rockwell, 2018).

To visualise the proximity of keywords and terms, a network collocation graph is used. In the collocation graph, keywords are represented as network nodes, connected with the relations, which vary in thickness and attract related keywords. The visualisations offer several interactive options. For instance, you can hover over a term to see its frequency (corpus frequency for the keywords; frequency in the context of the linked keywords for collocates), or filter or rearrange the elements, etc. By moving the elements in the collocation graph, the related keywords move according the strength of the relation (Sinclair and Rockwell, 2018). Unfortunately, in the printed version, only the static elements of presentations are provided and should therefore be used by the reader in their original form. In this paper, we will try to mitigate these limitations by additionally explaining some of the properties in the surrounding text and by providing links to the interactive versions of the figures to the readers.

### 3.2 Activities analysis

Activities analysis is one of the fundamental methods of providing insight into the processes and behaviour of participants (Dornan et al., 2007; Orion and Hofstein, 1994; Perry et al., 2002). Although it is time consuming, and can therefore only feasibly be applied to a small number of observed activities, it produces direct insight into elementary event development.

In the presented case, a selective activities analysis is used. Since we are particularly interested in the application of experiential learning concepts, activities related to reflective observation – which is part of the experiential learning framework – are analysed. The process consists of recording notes and analysing them according to the experiential learning framework.

### 3.3 Delayed feedback analysis

The third analysis dimension is focused on acquiring participant feedback. Usually, the feedback analysis is performed immediately after the event in order to gather fresh impressions. However, since we are interested in establishing participants' reflections on the implications of the learning environment activities in their real life, we felt it necessary to delay the survey.

The survey was designed to measure three aspects of the impact on the participants: the elements they remember after a longer period of time, their reflections on the content and the effect on their activities. Since a relatively small number of participants is involved in the study, only standard statistical methods are used.

## 4 The Jean Monnet module (summer school) analysis

The proposed methodology is used to provide insight into a single Jean Monnet Academic Module project: *»The Big Data EU Business implications summer school« (summer school)*. The summer school was executed over three years, 2016, 2017 and 2018, and it involved more than 84 participants, 57 of them students.

The summer school is executed as a part of the JMAM project schema, widely accepted throughout the EU with 366 completed and ongoing projects between 2014 and 2017 (Erasmus+, 2018a). The JMAM analysis is built on multiple closely interrelated systems, which have different goals, methods and structures:

- The **Jean Monnet institution** is a knowledge system, financing multiple activities to promote excellence in teaching and research in the field of European Union studies worldwide. Feedback on these activities is recorded in the form of JMAM reports.
- Each **JMAM** (in our case, Big Data EU Business Implications summer school) is designed to support the learning process of its participants by setting learning objectives and providing learning activities.
- Each **learning activity** uses a combination of learning methods to develop the knowledge of its participants.
- **The participatory approach** is focused on raising the level of active citizenship by providing support for individuals and communities in their real-life and learning activities.
- **Experiential learning** is a method where students experience near-real-life activities and learn how to understand and manage them with an eye to the future.
- JMAM **participants** use the learning resources, communicate, and share their competences to reach the learning objectives.

Of the elements identified above, activities and resources are those which focus on guiding the **participants** into becoming active citizens.

**The Jean Monnet institution** initiates and sponsors learning processes and interacts with **participants** through organised **modules** with **activities.** Therefore, we focused on three systems: **participants**, **Jean Monnet institution** and **activities.**

Two questions were posed:

Is the Jean Monnet institution aligned with the active citizen concept?

Are the activities used in the learning process truly efficient?

To answer these questions and to identify the behaviour of these interrelated activities, especially their effect on communities and their environments, we focus on observing participatory approaches and experiential learning elements by retrieving results and participant feedback. Three observation perspectives are established and correlated.

1. the Jean Monnet modules analyses, through statements related to multiple projects,
2. single project activities analyses,
3. the feedback analysis, through the participants' feedback on a single project.

Synthesis of these results is beneficial in helping us to exploit JMAM potentials fully, and to co-create active citizens in combination with participative approaches and experiential learning.

### 4.1 The Jean Monnet modules context analysis

JMAM project reports are provided in non-structured textual form. While performing the analysis, it is important to assess the same level of detail for every project.

JMAM are focused on providing insight into EU concepts. Data concerning completed JMAM is published on a website (EACEA, 2018). The data on the modules is limited to project summaries, no longer than 2000 characters, equipped with meta-data on the project coordinator. Therefore, the complete data on the 366 projects consists of no more than 732,000 characters, within 89,701 words, or occurrences of 15,773 different words after applying the stop keywords list. The structured detailed project description, which outlines the project activities, is not available for all of the projects. In some cases, links to project websites are provided, but since a standardised structure for all projects is not available, a structured analysis is inapplicable.

The data volume exceeds the capacity of the toolset Voyant tools used in the research (Sinclair and Rockwell, 2018). Therefore, the data is partitioned according to the year of the particular project. As a result, four data sets are formulated, containing project summary data for 2015, 2015, 2016 and 2017.

In order to provide the relevant results, only the data analysis of the 2017 projects is presented and compared with the participative approaches and experimental learning conceptual design. The major differences between the year 2017 and previous years are commented upon.

In figure 3, the most commonly used words in the 89 JMAM 2017 summaries are presented.

The most commonly used word is *students*, used 213 times, while *results* is used 203 times. The word *academic* is used 154 times, while research is used 104 times. The size of the words resembles the number of occurrences, while their orientation and colour are not related to the contents.

The terms of publication terminology relate to the participative approach and experiential learning; only a few are used: *knowledge* (95), *social* (73), *experience* (44), *relations* (39), *issues* (48), *contribution* (93). It is, however, interesting to observe the lack of occurrence of some words related to the participatory approach among the most important words in the examined texts. For instance: *learning* (replaced with teaching), *participation*, *cooperation. lifelong*, *disabilities, support, awareness, citizens.* This lack of key words might indicate that only partial overlapping can be observed also at the conceptual level.


*Figure 3: The 2017 JMAM summaries word cloud*

In figure 4, relations between the used keywords are visualised, with the blue coloured words identified as noted and the orange ones as leaves. The width of the ling among the words visualises the strength of the relation, while the position of words can be manually redesigned; therefore, position does not provide any additional explanatory power. To clarify the relations, the four most important words - students, results, research and academic - are positioned in the four corners of the collocates (links) graph.

Interestingly, not all of these words are closely related. Although there are relations between *students* and *research* and *academic* and *results*, there is a surprising lack of relations between *students* and *academic*, between *research* and *results* and between *students* and *results*. There are some indirect connections; *students*, for instance, are related to *academic* through *researchers*; *research* has a weak link to *results* through *publication*.

From these observations, we reason that the project organisers formed distinct groups of topics, focusing on only some of them in the projects, rather than attempting to design a holistic system. It is important not to forget that we are analysing a compendix of 89 project summaries, where multiple approaches are used in single instances; therefore, reasoning on a high level may not be correlated with actual performance on a single level.

The actual value of this graph, however, lies in its capacity to research the existence (or non-existence) of relations shaping the questions related to the current research objective or to clearly identify unexpected features in the text. Words with a strong direct relation to *students* are: *teaching, research, public, researchers and dissemination*. Other relations can be identified through these words, for instance, *knowledge, development, law*, etc.

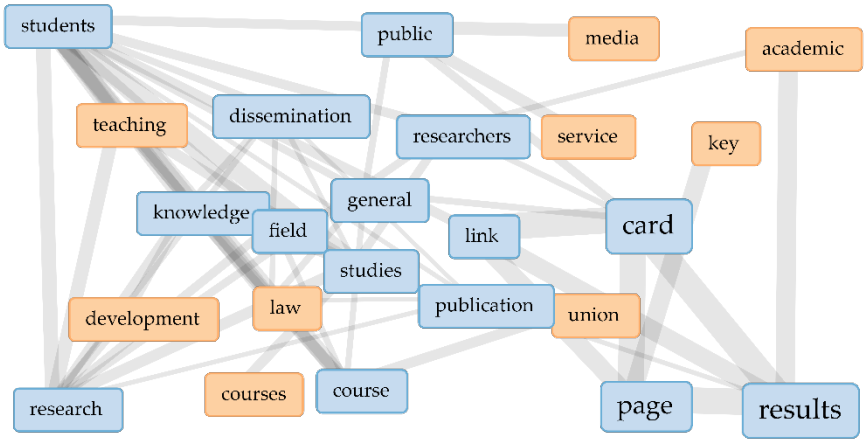



*Figure 4 The 2017 Jean Monnet module summaries words collocation graph*

Very few connections can be made regarding experiential learning: the links between *students* and the words *examining, reflection*, etc. are not found, while even the term *learning* is substituted by the term *teaching*, which is indicative of a passive student role. Therefore, we can safely conclude that the relation between JMAM and experiential learning is either non-existent or, in the best case, weak.

The relations to the participative approach appear stronger; this appears to be a solid conclusion. Through *research*, *students* are connected with *development*. On a personal level, *critical thinking* can be related through the term *studies*, while links to *leadership* cannot be identified. *Community relations* can be weakly related to the term *law*, and the understanding of differences is again hard to follow. Civil participation and civic engagement properties can be associated through the words *public* and *studies*, while *dissemination* can be understood as one of the ways to spread thinking –although the interpretation power of this relation is extremely weak. Again, it is difficult to identify active participation elements in the collocation analysis.

### 4.2 The activities analysis

The purpose of a system is what it does - adapted from Stafford Beer (Beer, 1979). The complexity of an individual Jean Monnet module greatly exceeds the declarative statement analysed in the previous steps of our research. Therefore, to better assess the alignment of Jean Monnet Modules with participative approaches and experiential learning, the activities of a single instance of a Jean Monnet module are analysed.

The alignment to experiential learning resembles the structure of the summer school yearly processes and the four stages of experiential learning:

1. **Concrete experience**: Student groups are supplied with a big data based product or service. The proposition is future oriented, therefore their task is to evaluate its feasibility, the changes it will deliver and the alignment with the current ruleset.
2. **Reflective observation**: During the summer school, students are shaping and discussing their perspectives, resulting in the opening of multiple experience learning loops.
3. **Abstract conceptualisation**: Individually formed aspects and the group members' perspectives are set out in the proposal formulation.
4. **Active experimentation**: The main learning loop closes with the presentation. The proposals are commented upon in the form of feedback and suggestions for further work.

The vast majority of the processes and structures in the summer school are oriented to support step two in the process. Since the expected abstract conceptualisation complexity is very high and consists of multidimensional multi-level perspectives, the reflective observation processes should enable its gradual development. To appropriately assess the reflective observation processes, the summer school structure and processes are examined from the reflective observation perspective.

The structure of the summer school resembles a multidimensional network, comprised of heterogenic student groups, experts from the environment, teachers and thus teaching methods, formal and informal contact focus points. All these resources are focused on supporting student group work and developing idea projects. The learning environment provides students with a learning path with multiple resources, guidelines and activities explaining the multiple perspectives related to their tasks.

In the summer school, heterogenic groups of up to 5 students are formed to develop a Big Data based project proposal considering a basic idea from multiple perspectives: feasibility, the value added, accordance with the law, and ethical perspectives. The groups are mentored by expert professionals.

During the summer school, students participate in lectures on the topics of EU backgrounds, business perspectives, project management and IT backgrounds. The teaching process is subordinated to acquiring helpful insights in order to execute the project goals. In this way, students learn how to use theoretical backgrounds to find solutions for resolving the issues with which they are confronted. Lecturers are familiar with the content of the student groups' projects. This way they should modify their lectures to be better aligned with the students' requirements, delivering information perceived by the students as useful.

Contact with the lecturers is broken down into two parts: the first part of this contact is the lectures, while in the second part – the breaks - informal discussion takes place, with students playing an active role in the communication and the teachers turning from knowledge providers to counsellors.

The project work itself uses agile project management elements and is based on multi-level cooperation: on a single task level, cooperation rests on intra project coordination as well as on trans project communication. In the last year of the summer school, the project groups do not compete, but cooperate to determine the best solutions to problems. Adequate time for communication is provided through multiple breaks during the course of the day, as well as after the official hours and during a field trip.

Multiple synchronous and asynchronous communication channels are available. Each project group manages a Padlet (Padlet, 2018) canvas for storing documents and commenting on the contents. Materials uploaded by the lecturers are available, allowing students to prepare for the lectures. Teaching takes place on site, with the support of remote teaching and remote listening to the lectures.

Each year the summer school concludes with the students' project proposal presentations and an open debate among professional experts and lecturers. Presentations serve to collect feedback and potential incentives on how to improve their work. Multiple topics are open for debate, for instance how to adequately acknowledge personal involvement in the group results.

### 4.2.1 Reflective observation – activities analysis

Special focus is placed on the development of communication skills and student proficiency in acquiring reliable information resources. Multiple communication options and channels resembling real-life situations are available. Observation of their actual use is executed by the authors of the project during the summer school, which means that although the measurements try to capture all communication flows, some are inevitably not identified.

*Table 2: Reflective observations elements – activities analysis*

| Reflective observation | Notes | Reasoning |
|---|---|---|
| Listening to lecturers | Focused only when strongly correlated with the project. Important: practical examples (may be) upgraded with theory and the presence of an appropriate lecturer. | Students are already extremely proficient in selective listening and ignoring the lectures. The learning loop on the teacher side is relatively weak because of insufficient feedback over the years. |
| Communication with the lecturers | Students only reluctantly address lecturers and experts directly. Informal conversation, lecturer presentation style, proper introductions, suitable choice of topic are helpful. Skills improve through practice. Some students already possess the skillset and use it effectively. Respect to the lecturer downgrades the communication considerably. | Students tend to communicate with people they can relate to easily. Introductions and positive experience help. During the summer school, the conversation level improves. Experience in communication with authority figures is extremely important. |
| Team communication | After designing the team structure, the team discussion progresses. The discussion is performed during the breaks and lectures not closely related to the projects. Lectures related to the project trigger instant digital communication. | The heterogeneous teams need adaptation time to develop communication protocols. These are used to co-create team perspectives. The quality of communication improves through time. |
| Cross team communication | Very limited. In a non-related and competitive environment, it is practically non-existent. In a cooperation environment, it is executed if facilitated by the lecturers. | Even though the teams were similarly structured, members were often not aware of the other team members with similar tasks.<br>Introducing people with similar tasks improved communication. Groups solving similar issues initiated communication. However, few resources were shared. |
| Digital communication | Digital communication is widely used to: store the group's knowledge and to provide an informal communication channel used during the lectures. | Ubiquitous use by students of digital communication creates a new communication layer. It contributes considerably in forming the team perception of the environment. It provides a challenge for the lecturer to compete with the new communication layer. |
| Research | Interestingly, research is performed in three types of environment: time designated for research, non-related lectures and closely-related lectures. | In closely-related lectures, students used the resources provided by the lecturer. During the non-related lectures, extensive individual and group research is performed. Due to the complexity of the challenges, more heterogenic teams would be appropriate. |

As depicted in table 2, student basic competences differ substantially. The weakest, and therefore worthy of mention, are communication with the lecturer and cross-team communication. In both, positive experience is required to start the process.

In communication with the lecturer, two factors act as major obstacles: the lecturer position (attitude) and the helpfulness of the topic covered by the lecture. Methods used in the summer school, such as informal communication during the breaks, are partially successful. They improve by introducing the lecturer and a (small group of) students and opening a discussion related to student issues. After a positive experience, student reluctance to address authoritative figures diminishes slightly. It is worth mentioning that the student capacity to communicate (after the initial start) is at an appropriate level.

Inadequate cross team communication is due to the fact that students are trained to compete, and information is considered a valuable asset worth keeping. Additionally, it is hard for them to identify the value of shared information, leading to under-appreciation of the sharing of experiences with their peers. In the first two years, where a neutral and competitive environment prevailed, cross-team communication was limited.

In the third year of the summer school, the method of clearly announcing the cooperative nature of the learning process proved to have minimal positive results – only in cases where students from different teams were actually closely related in the real world. When this method is combined with the informal guiding toward finding solutions to common issues, there have been some positive results. The method is relatively simple: members of other teams are invited to find a common solution to a question posted by a member of a team to a lecturer. The feedback on finding a common solution is clearly valuable for all the participants. Nevertheless, the results are not fully satisfying, as there were only a few discernible attempts at self-organising inter-team collaboration during the summer school.

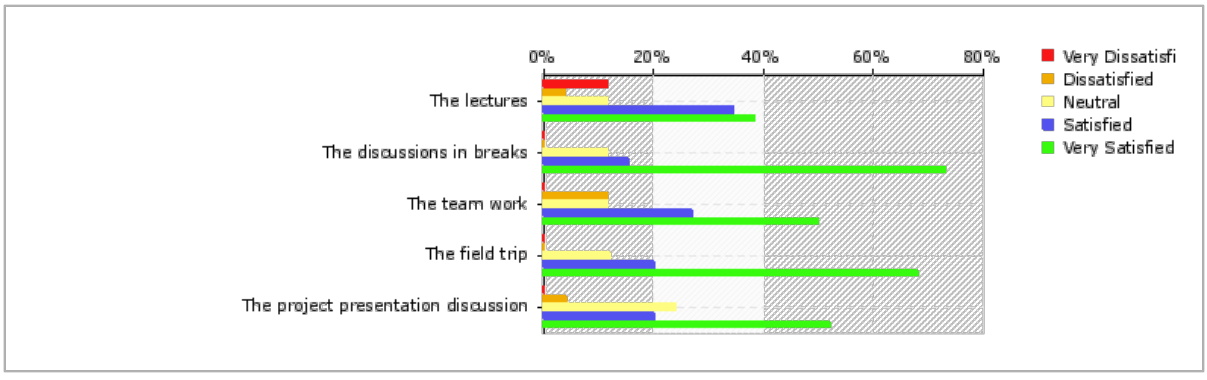
Based on our activities analysis, we can conclude that the basic elements of experiential learning are addressed, although the overlapping is, at present, incomplete. In the summer school, additional factors are dealt with (group work, intra group communication, multidimensional perspectives etc.), while the experience is not based on an actual issue, since it is future oriented.

### 4.3 The delayed feedback analysis

The survey was sent to 57 participants; 42 responded, with 27 of them delivering a full survey. The response rate is slightly below 50. The attendees who did not complete the survey (15) decided not to answer the demographic (optional) questions. This can be interpreted as a sign of their relatively high awareness of the importance of personal data.

To refresh the memory of the students on the summer school content and activities, two satisfaction questions are asked: in the first: “How much did you enjoy summer school activities?”, we expected to establish their preferences regarding the summer school key learning technologies.

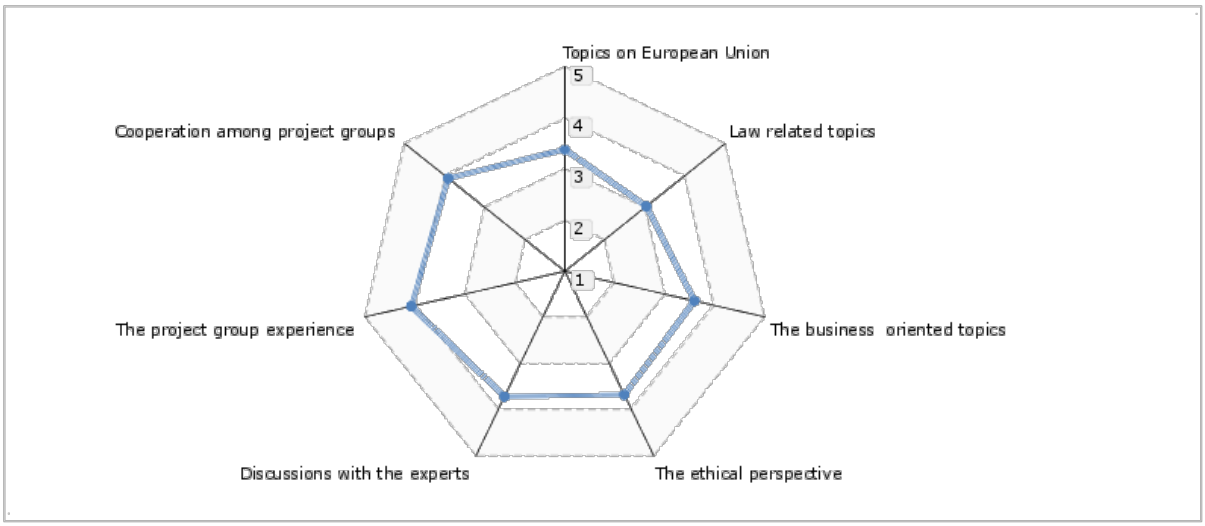
*Figure 5 How much did you enjoy the summer school activities?*



In figure 5, the lectures received the lowest ratings, while the most encouraging feedback related to the discussions in breaks and the field trip, during which cooperation and experience exchange learning elements took place. Team work and project presentations received generally positive feedback, with only some negative elements.

The aim of the second question “Which contents do you still remember?” Is to refresh their (the students’) memory of the contents after three months, a year, or two years.

*Figure 6 which contents do you remember?*




As depicted in figure 6, participants remembered the cooperation within project groups. Interestingly, cooperation among groups and discussion with the experts was also well remembered. The long-term memory regarding “official” summer school topics was weaker.

The most important part of the feedback analysis is the evaluation of the perceived value added in three participative approach segments: personal engagement, inclusion in society and civic participation. The results are presented in figures 8, 9 and 10.

*Figure 7 Do you feel the summer school helped you (personally)?*

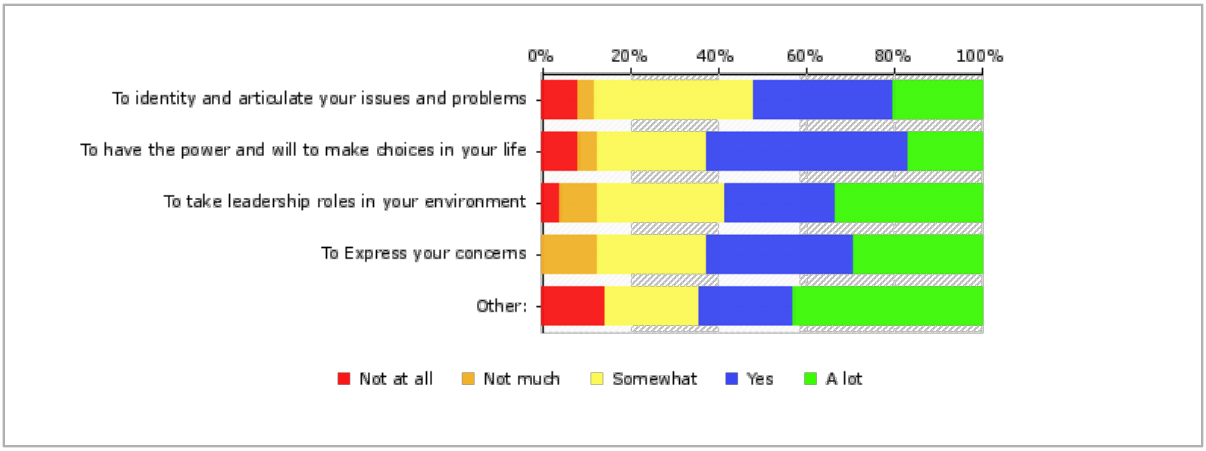


*Figure 8 Do you feel the summer school helped you (regarding your environment)?*

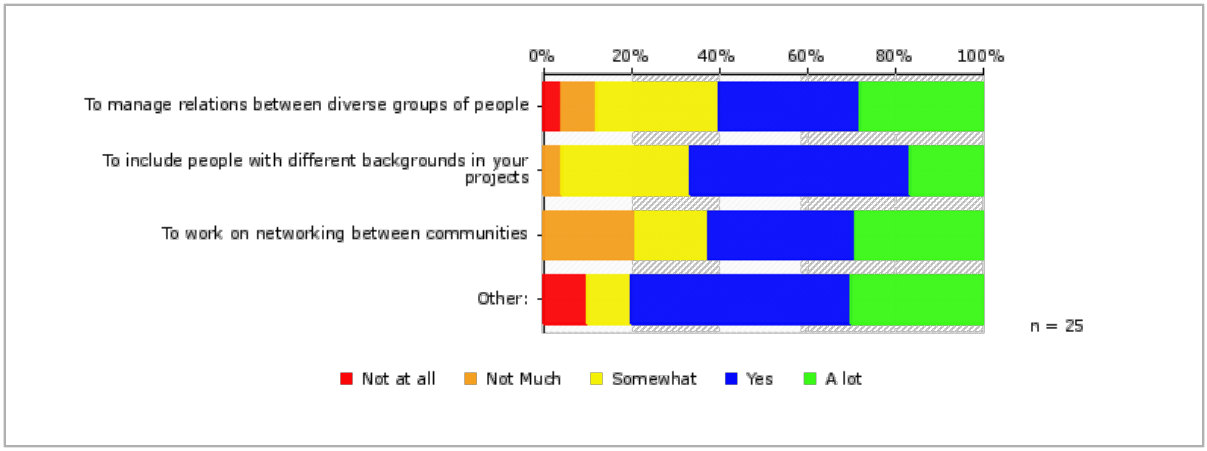
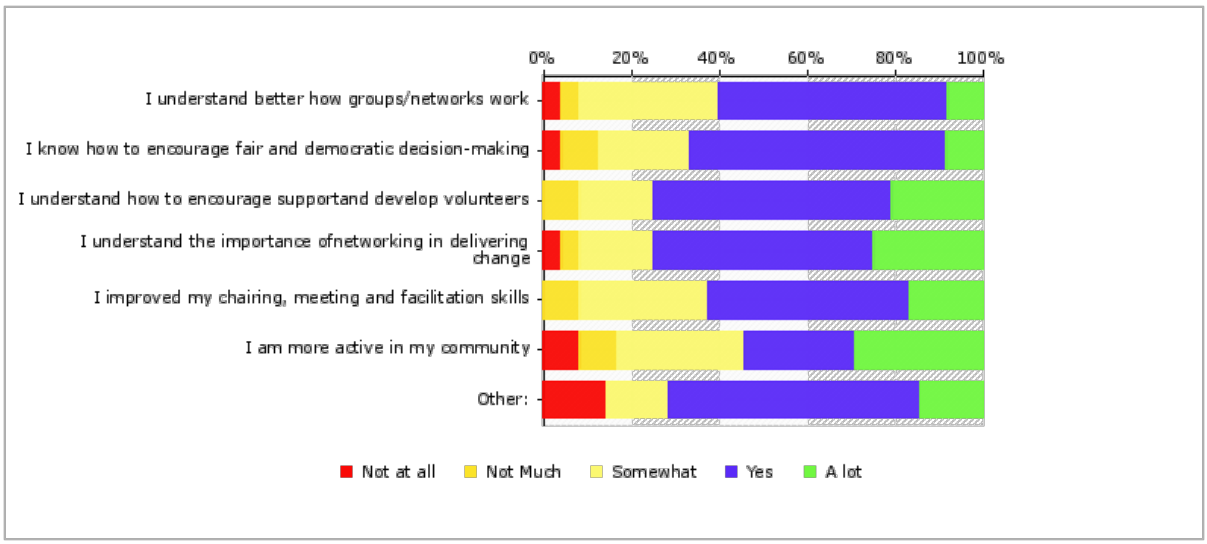



*Figure 9 Do you feel the summer school helped you (civil participation)?*



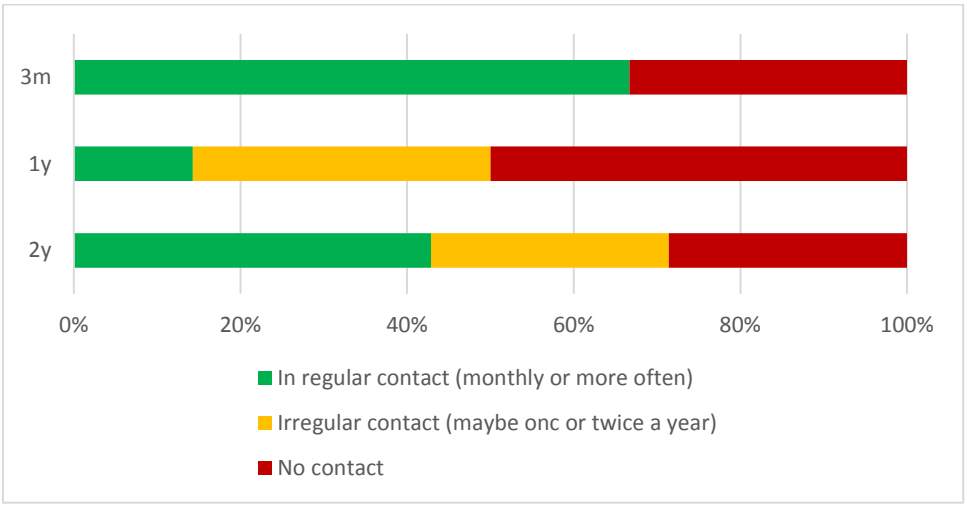

Over 80 percent of the participants felt the summer school provided at least some value added in all elements related to the participative approach, while at least 60% of the participants answered with a clear yes, or even “a lot”.

Although the overall picture is positive in all areas, it can also be read slightly differently. The areas in which results could be improved must be mentioned. Importantly, almost 50 percent of the participants felt the summer school did not provide more than somewhat of an improvement in the identification and articulation of their problems. Not surprisingly, similarly, more than 40 percent felt the same concerning taking a leadership role in their environment.

As for the social environment, around 40 percent perceived only ‘somewhat helps’ in managing relations and networking between communities. Similarly, around 40 percent did not significantly improve their understanding of how groups/networks work, and most importantly, more than 40 percent felt that participating in the summer school did not significantly help them to be more active in their communities.

The participants’ comments were focused on the experience of meeting new people. Most of them support connections with companies that generate future business cooperation. From the content, we can conclude that many of the participants display a highly developed self-centred perspective, with the environment mostly used for achieving their personal goals.

*Figure 10 Are you in contact with summer school participants (at least two of them?)*

1. 


In Figure 10, the concrete linking effects with members of the summer school project teams are addressed. Students are divided into three groups: students that were surveyed two years after summer school, students that finished the summer school a year ago and students that finished the summer school three months ago. Not surprisingly, more than 60 % of the students keep up contact after three months, while in the group questioned on active contact after one year, only 50% of the students report that they maintain contact. Interestingly, 75% of the students surveyed two years after the completion report still keep in contact with other participants.

### 4.4 Synthesis and the Systems perspective

The research reported in this paper offers a multi-dimensional perspective on active citizen development in JMAM through a participative approach and experiential learning concepts. Although the main goal of Jean Monnet modules is to teach students EU related concepts, the question is how aligned it is with increasing the students' abilities to act as active citizens.

Systemically, it is necessary to emphasise that modules should support learning rather than teaching, enabling communication among participants through related activities and providing knowledge to improve the experience of interaction among students as well as between them and those in their communities and areas of professional activity. At a general level, we may expect that for all modules, lecturers and students alike will need to develop a deeper appreciation of systemic concepts, such as system boundaries, structures relevant to their inquiries and relationships to support a more active and open participatory approach in the situations implied by the modules they are learning about.

The paper offers methodological support for the analysis. The basic concepts of the participative approach and experiential learning (see Figure 1 and 2) are used as a benchmark for assessing the JMAM alignment/gap with Active Citizen Learning on three levels: personal, community relations, and civil engagement level.

The three methods are used in the research process:

- context analysis of the JMAM reports,
- activities analysis of a selected module, and
- delayed feedback analysis

The methods, when combined, illuminate the observed phenomena from multiple viewpoints and thereby provide a requisite holistic picture to better understand the issues and suggest modifications on multiple levels.

Based on the context analysis reports of the completed Jean Monnet modules, few connections with the experiential learning concepts can be made: the links between *students* and the terms *examining*, *reflection*, etc. are not found, while even the term *learning* is substituted by the term *teaching*, which is indicative of a passive student role. Therefore, the conclusion can be safely made that the relation between the existing Jean Monnet modules and experiential learning is, at best, weak.

The relations between the completed Jean Monnet modules and the participative approach appear somewhat stronger. Relations between the words *research*, *students* and *development* appear strong. On a personal level, the term *critical thinking* can be related through the term *studies*, whilst links to *leadership* cannot be identified. Civil participation and civic engagement properties could be associated through the words *public* and *studies*, while dissemination can be understood as one of the ways to spread thinking – although the interpretation power of this relation is extremely weak. It is possible to conclude that although some elements of the participative approach are put forward in the Jean Monnet modules, an increase in self-awareness and the ability to act responsively should be proposed to the students.

From the systemic perspective of this research, participatory approaches are proposed to enhance the experiential learning of EU students. The approach aims at engaging students in different forms of team work and field activities to give them incentives to make reflective observations and experiment in shared topics.

In the activities analysis, the use of experiential learning in a selected Jean Monnet module is analysed. A typical experience learning loop consist of four phases. In the summer school the basic student learning loop consists of 1. project issues, 2. multiple instances of reflective observations encapsulated in summer school activities, 3. preparation of the project proposal and 4. presentation with feedback. In the activities analysis, we were especially interested in the reflective observations, focusing on the communication competences of the students.

The activity analysis provided generally positive results although some sub-average communication related issues should be pointed out: communication with the lecturers (authority issues), and cross team communication. During the summer school, these were actively addressed with multiple methods: informal communication, personally introducing people, a cooperative environment and common problem-solving exercises. The results were promising: students experienced open discussion with the authorities and experienced the importance of sharing. Additionally, the teachers and organisers used the knowledge gathered during the learning process to modify the Jean Monnet module the following year and to transfer the experience to their regular classes.Designing activities in modules that address student interests and improve student active citizen competences is immensely challenging. The experiential learning concepts can help us design the learning process, and additionally, can help the teachers learn from the experience. It is, however, important to integrate the self-reflective element of the learning process in all aspects of module preparation and execution with special care.

If one of the main goals is the development of active citizens, how can we assess this if we have actually helped them in this regard? Are the results instant? Should we expect a high level of activity from all participants? Will the participant understanding of their involvement change over time? The long - term effects were analysed using a delayed survey.

The survey consists of a few questions for the students to re-familiarise themselves with the summer school topics, and three sets of questions focused on establishing the long-term impact of the summer school, correlated with the participative approach. The participants reported a significant improvement in personal preferences, strong improvements in activities in society and some improvements in advances in their civic society participation. The test questions their capacity to manage relations partially supported by their self-observations.

From the responses in the delayed feedback analysis, we can conclude that the participants gained some insight, but still need additional experience to help to turn them into more active citizens, capable and prepared to share their energy and competences with wider society.

Alignment with the participatory approach and active citizenship - see table 2 - can be assessed on multiple levels:

1. **Personal**: The content and activities of the summer school supported students to actively cooperate in a project team. The project idea has to be examined from five perspectives during the course of their work. Critical thinking, and individual research and communication skills are required here. Some of them experienced a leadership role. Additional activities focused on building trust in their capacities and the will to actively look for support could help the summer school provide more support on a personal level.
2. **Community relations:** Social inclusion is examined by the creation of heterogenic teams, the support of other teams and especially the task of examining the ethical perspective of their projects. There is, however, not much emphasis on those excluded from society in lectures. The main focus is on supporting students to investigate the surrounding issues that might be affected by their activities. We can conclude here that the activities should be better aligned with the participative approach.
3. **Civil participation and civic engagement:** In the summer school, students are encouraged to think about the effects of using a disrupting technology in society. Through this experience, they are presented with the notion of how to modify society's rulesets. Among others, they explore this change from both the legal and ethical perspective. The learning process involves advocating their perspective in the group and communicating on similar issues with other group members. The summer school is, however, focused on investigating the implications for business, which is mainly focused on generating profit. This perspective differentiates the summer school from civic engagement, as observed in student feedback.
4. Can participants report improved active citizenship? Can we improve Jean Monnet modules and transfer the learning methods to regular curricula? These are ultimately the main research questions. There is evidence that there is room for improvement in the quality of Jean Modules, that experiential learning and the participative approach did support the participants' active learning and that some long-term effects have been achieved using the examined methods. This research advocates that experiential learning and participatory approaches, if systemically supported, actively monitored and enhanced, can offer opportunities to strengthen the quality of the learning and overall experience of the summer school participants.
5. The proposed multi-level monitoring methodology can support improvements in the concepts, activity and long-term effects of the learning process. In the future, through the monitoring of the modules reports, it may be possible to establish directions for a more systemic perspective on these modules.
6. The design of long-term feedback loops between all the participants, i.e. students, lecturers and support staff, are essential in the long-term development and redesign of the concept. The recursive design of learning systems can be supported by the application of Beer´s Viable System Model (Beer, 1979, Espejo and Reyes, 2011); it offers a platform for experiential and participatory approaches for future development of 'active citizenship' in experiential situations.
7. The processes of planning, executing and actively observing learning events are complex and should be simplified only to a certain level. What we have learned is that the participative approach is helpful in setting the multileveled goals of the learning process and evaluating its

long-term results. We have found that experiential learning concepts can actively engage participants and at the same time challenge them to reach a new level in their understanding of background concepts.

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The proposed multi-level monitoring methodology can support improvements in the concepts, activity and long-term effects of the learning process. In the future, through the monitoring of the modules reports, it may be possible to establish directions for a more systemic perspective on these modules.

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## 5 Summary

The learning process prepares students for the world they will soon encounter. Regular curricula are often focused on repeatedly delivering prepared materials to large groups of students, with a fixed structure. Therefore, additional modules, as supported by Jean Monnet, can provide the space for experimentation, collection of feedback and thus the development of the learning process.

In this paper, we have explored the alignment of the Jean Monnet modules with a method of achieving an exceptionally important but difficult to achieve goal: how to support the development of active citizens, capable of shaping their identity and constructing relations through recurrent interactions, and together –in practice - forming the concept of active citizenship. It is important to focus on multiple aspects of the learning process, which is why a systemic multi-level perspective is used to analyse the relations between Jean Monnet modules, experiential learning, participative approaches and the development of active citizens.

Our examination combines three viewpoints: a state-of-the-art gap analysis of the completed Jean Monnet modules, the activity analysis of a selected Jean Monnet module, and feedback analysis, focusing on the long-term effects as reported by the participants. The synthesis of the research report provides a more holistic overview on the implementation of experience learning and participative approaches and at the same time opens the discussion on how to improve the learning process. The most important finding is that this type of requisite holistic insight enables continuous enhancement of the learning process.

In the research, we have identified a gap between the previous Jean Monnet academic module reports and the experience learning and participative approaches concepts. In the activity analysis, some sub-optimal behaviour patterns were identified, and some were successfully addressed, either within the

module executions or in the next repetition, and finally, some long term positive effects of developing the abilities and activities of active citizens were observed.

The research reports are beneficial for lecturers on multiple levels. First, the positive effects of the participative approach and experiential learning can be supported. Second, the importance of the multi-level systems perspective is important in comprehending the complexity of the learning process. Third, the importance of repeated examination of the learning process supports its continuous re-aligning on the conceptual level, application level and bears in mind the long-term learning effects for all participants in the learning process – including the teachers.

For students, it provides an example of the importance of being active in the learning process and using the available resources as offered by the learning environment.

For policy makers, it provides evidence of the importance of the learning events that expand the limitations of the regular curricula, such as Jean Monnet modules and the need for supporting additional events and finally, the usefulness of participative approaches and experience learning in the process of developing active citizens.

This research report has limitations regarding the articulation of the results and its comparison methods. The variety of the multiple elements in the learning process makes it difficult for the reader to be familiarised with potentially successful learning approaches, but it does provide a systems perspective toolset that can help identify gaps, monitor and adjust activities and acquire feedback on the learning process results. The concepts of the monitoring system, which is focused on supporting changes in the learning process and the sharing of positive experiences should be researched further in the future.

**References**


Anthony, R. N. (1965). *Planning and Control Systems: A Framework for Analysis*: Harvard University Graduate School of Business Administration, Cambridge.

Ashby, W. R. (1956). *An introduction to cybernetics*: Chapman & Hall, London.

Beer, S. (1979). *The Heart of Enterprise*. Chichester: Willey.

Bogdanski, C. (1977). RECENT PROGRESS IN CYBERNETIC FORMALIZATION OF BIOTIC SYSTEMS-MODEL. *Kybernetes, 6*(4), 265-271. doi:10.1108/eb005459

Boulding, K. E. (1956). General systems theory—the skeleton of science. *Management Science, 2*(3), 197-208.

Bratman, M. (1987). *Intention, Plans, and Practical Reason*. Cambridge: Harvard University Press.

Castells, M. (2011). Crisis y Sistema in De la Crisis Economica a la Crisis Politica. *Barcelona Libros Vanguardia*, 126-129.

Castells, M. (Producer). (2017, 1.9.2018). Lección inaugural del curso académico 2017-2018: La universidad en la era de la información Retrieved from https://www.youtube.com/watch?v=WfQTJy0dyRg

de Santos, R. O., Torrego, L., & Santamaria-Cardaba, N. (2018). Democracy in Education and the Movements of Pedagogic Renovation: Evaluation of Democratic Educational Experiences. *Revista Internacional De Educacion Para La Justicia Social, 7*(1), 197-213. doi:10.15366/riejs2018.7.1.010

Dornan, T., Boshuizen, H., King, N., & Scherpbier, A. (2007). Experience-based learning: a model linking the processes and outcomes of medical students' workplace learning. *Medical Education, 41*(1), 84-91. doi:10.1111/j.1365-2929.2006.02652.x

EACEA. (2018). Jean Monnet. Retrieved 2018 from https://eacea.ec.europa.eu/erasmus-plus/actions/jean-monnet_en

Erasmus+. (2018a). Erasmus+ and Former Programmes Projects Overview. Retrieved 2018 from https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-projects-compendium/

Erasmus+. (2018b). Erasmus+ PROGRAMME GUIDE. Retrieved 2018 from https://ec.europa.eu/programmes/erasmus-plus/programme-guide

Espejo, R., Bowling, D., & Hoverstadt, P. (1999). The viable system model and the Viplan software. *Kybernetes, 28*(6-7), 661-678. doi:10.1108/03684929910282944

Espejo, R., & Kuropatwa, D. (2011). Appreciating the complexity of organizational processes. *Kybernetes, 40*(3-4), 454-476. doi:10.1108/03684921111133683

Espejo, R., Schuhmann, M., Schwaninger, M., & Bilello, H. (1996). *Organizational Transformation and Learning*. Chichester: Wiley.
Espinosa, A. (2015). Governance for sustainability: learning from VSM practice. *Kybernetes, 44*(6-7), 955-969. doi:10.1108/k-02-2015-0043
EU. (1950). The Schuman Declaration – 9 May 1950. Retrieved 2018 from https://europa.eu/european-union/about-eu/symbols/europe-day/schuman-declaration_en
EUExpertAdvisoryGroup. (2018). Horizon 2020: Societal Challenge 6 Europe in a changing world –Inclusive, innovative and reflective societies. https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/SC6_EAG_report_2018-2020.pdf Retrieved from https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/SC6_EAG_report_2018-2020.pdf
European_Commision. (2016). *EU youth report 2015* Retrieved from http://ec.europa.eu/youth/library/reports/youth-report-2015_en.pdf Retrieved from http://ec.europa.eu/youth/library/reports/youth-report-2015_en.pdf
Fals-Borda, O., & Rahman, M. A. (1991). *Action and knowledge: Breaking the monopoly with participatory action-research*: Apex Press New York.
Freire, P. (1972). *Pedagogy of the Oppressed*. Harmondsworth: Penguin.
Guerin, L. J. F., van der Ploeg, P. A., & Sins, P. H. M. (2013). Citizenship education: the feasibility of a participative approach. *Educational Research, 55*(4), 427-440. doi:10.1080/00131881.2013.844945
Hemetsberger, A., & Reinhardt, C. (2006). Learning and knowledge-building in open-source communities - A social-experiential approach. *Management Learning, 37*(2), 187-214. doi:10.1177/1350507606063442
Holmqvist, M. (2004). Experiential learning processes of exploitation and exploration within and between organizations: An empirical study of product development. *Organization Science, 15*(1), 70-81. doi:10.1287/orsc.1030.0056
Holten, R., & Rosenkranz, C. (2011). Designing viable social systems The role of linguistic communication for self-organization. *Kybernetes, 40*(3-4), 559-580. doi:10.1108/03684921111133746
Jochum, V., Pratten, B., & Wilding, K. (2005). Civil renewal and active citizenship a guide to the debate. Retrieved 2017 from https://www.ncvo.org.uk/.../civil_renewal_active_citizenship.pdf
Kakouris, A. (2015). Entrepreneurship pedagogies in lifelong learning: Emergence of criticality? *Learning Culture and Social Interaction, 6*, 87-97. doi:10.1016/j.lcsi.2015.04.004
Kobayashi, V. B., Mol, S. T., Berkers, H. A., Kismihok, G., & Den Hartog, D. N. (2018). Text Mining in Organizational Research. *Organizational Research Methods, 21*(3), 733-765. doi:10.1177/1094428117722619
Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education, 4*(2), 193-212. doi:10.5465/amle.2005.17268566
Lange, E. A. (2004). Transformative and restorative learning: A vital dialectic for sustainable societies. *Adult Education Quarterly, 54*(2), 121-139. doi:10.1177/0741713603260276
Lantz, A., Hansen, N., & Antoni, C. (2015). Participative work design in lean production A strategy for dissolving the paradox between standardized work and team proactivity by stimulating team learning? *Journal of Workplace Learning, 27*(1), 19-33. doi:10.1108/jwl-03-2014-0026
Marri, A. R. (2005). Building a framework for classroom-based multicultural democratic education: Learning from three skilled teachers. *Teachers College Record, 107*(5), 1036-1059. doi:10.1111/j.1467-9620.2005.00503.x
Martens, A. M., & Gainous, J. (2013). Civic Education and Democratic Capacity: How Do Teachers Teach and What Works? *Social Science Quarterly, 94*(4), 956-976. doi:10.1111/j.1540-6237.2012.00864.x
Mayo, M., Mendiwelso-Bendek, Z., & Packham, C. (2013). *Community Research for Community Development* London: Palgrave
Mendiwelso-Bendek, Z. (2015). Community-based research: enabling civil society's self-organisation. *Kybernetes, 44*(6-7), 903-912. doi:10.1108/k-02-2015-0056
Mendiwelso-Bendek, Z., Recknagel, G., Hartley, T., Rooke, A., Mayo, M., Packham, C., & Milburn, K. (2013). TAKE PART UK Learning Framework Retrieved 2017 from http://takepartresearchcluster.blogs.lincoln.ac.uk/files/2013/07/13946_Take-part-learning-framework-final-2011.pdf
Monnet, J. (1939). Thoughts on the future. Retrieved 2018 from https://www.cvce.eu/en/obj/jean_monnet_s_thoughts_on_the_future_algiers_5_august_1943-en-b61a8924-57bf-4890-9e4b-73bf4d882549.html
Mulej, M., & Potocan, V. (2007). Requisite holism - precondition of reliable business information. *Kybernetes, 36*(3-4), 319-332. doi:10.1108/03684920710746986

Orion, N., & Hofstein, A. (1994). FACTORS THAT INFLUENCE LEARNING DURING A SCIENTIFIC FIELD TRIP IN A NATURAL-ENVIRONMENT. *Journal of Research in Science Teaching, 31*(10), 1097-1119. doi:10.1002/tea.3660311005

Padlet. (2018). About. Retrieved 2018 from https://padlet.com/about

Perry, N. E., VandeKamp, K. O., Mercer, L. K., & Nordby, C. J. (2002). Investigating teacher-student interactions that foster self-regulated learning. *Educational Psychologist, 37*(1), 5-15. doi:10.1207/s15326985ep3701_2

Revell, A., & Wainwright, E. (2009). What Makes Lectures 'Unmissable'? Insights into Teaching Excellence and Active Learning. *Journal of Geography in Higher Education, 33*(2), 209-223. doi:10.1080/03098260802276771

Rios, J. P., Suarez, X. L. M., & Jimenez, I. V. (2012). Design and diagnosis for viable organizations in practice: university urban planning. *Kybernetes, 41*(3-4), 291-317. doi:10.1108/03684921211229415

Sanchez-Segura, M. I., Hadzikadic, M., Dugarte-Pena, G. L., & Medina-Dominguez, F. (2018). Team Formation Using a Systems Thinking Approach. *Systems Research and Behavioral Science, 35*(4), 369-385. doi:10.1002/sres.2536

Sinclair, S., & Rockwell, G. (2018). Voyant Tools. Retrieved from https://voyant-tools.org/

Somech, A. (2002). Explicating the complexity of participative management: An investigation of multiple dimensions. *Educational Administration Quarterly, 38*(3), 341-371. doi:10.1177/0013161x02383003

Subramaniam, S. R. (2012). Lifelong Learning Programmes for Sustainable Development. *Asia-Pacific Education Researcher, 21*(3), 625-635. Retrieved from <Go to ISI>://WOS:000311524200020

Tam, H. (2018). Question the Powerful: The Most Important Ideas to Teach. http://henry-tam.blogspot.com/ Retrieved from http://henry-tam.blogspot.com/

ten Dam, G., & Volman, M. (2004). Critical thinking as a citizenship competence: teaching strategies. *Learning and Instruction, 14*(4), 359-379. doi:10.1016/j.learninstruc.2004.01.005

The_World_Bank. (2018, 20.2.2018). World Development Report 2018: Learning to Realize Education's Promise. Retrieved

Velardo, S. (2018). Social determinants of health: A pedagogical framework for advancing the Citizen Scholar. *Education Citizenship and Social Justice, 13*(3), 268-279. doi:10.1177/1746197917731277